

## CLAIM AMENDMENTS

1.-20. (Cancelled)

21. (New) A method to provide memory upgrade information comprising:  
obtaining memory configuration information of a computer system;  
determining a memory capacity of the computer system, including automatically  
determining whether a characteristic of a memory device installed in the computer system other  
than a size of the memory device limits the memory capacity of the computer system; and  
automatically determining memory upgrade options based on the determined memory  
capacity of the computer system.

22. (New) The method of claim 21, wherein the act of obtaining memory  
configuration information comprises obtaining an indication of an installed system memory  
amount.

23. (New) The method of claim 22, wherein the memory configuration information  
further comprises a number of memory module sockets.

24. (New) The method of claim 22, wherein the memory configuration information  
further comprises an operating speed of the installed system memory.

25. (New) The method of claim 21, wherein the act of obtaining memory  
configuration information comprises accessing a non-volatile storage device.

26. (New) The method of claim 25, wherein the act of accessing a non-volatile  
storage device comprises accessing a serial presence detect device.

27. (New) The method of claim 21, wherein the act of obtaining memory  
configuration information comprises obtaining information from one or more dynamic random  
access memory devices.

28. (New) The method of claim 21, wherein the act of determining a memory capacity comprises obtaining an indication of a maximum number of memory devices for the computer system.

29. (New) The method of claim 21, wherein the act of determining a memory capacity comprises obtaining an indication of a maximum amount of memory for the computer system.

30. (New) The method of claim 21, wherein the act of determining a memory capacity comprises obtaining an indication of a maximum number of memory module sockets for the computer system.

31. (New) The method of claim 21, further comprising providing memory upgrade options to a user.

32. (New) The method of claim 21, wherein the characteristic comprises a limit on the number of memory devices that can be installed on a memory channel regardless of the number of open memory examination slots.

33. (New) The method of claim 21, wherein the characteristic comprises a limit on the number of memory devices that can be used with a memory controller.

34. (New) A program storage device, readable by a programmable control device, comprising instructions for causing the programmable control device to:

- obtain memory configuration information of a computer system;
- determine a memory capacity for the computer system, including automatically determining whether a characteristic of a memory device installed in the computer system other than a size of the memory device limits the memory capacity of the computer system; and
- determine memory upgrade options based on the determined memory capacity of the computer system.

35. (New) The program storage device of claim 34, wherein the instructions to obtain memory configuration information comprise instructions to obtain an indication of an installed system memory amount.

36. (New) The program storage device of claim 35, wherein the memory configuration information further comprises a number of memory module sockets.

37. (New) The program storage device of claim 34, wherein the instructions to obtain memory configuration information further comprise instructions to obtain an indication of a number of memory module slots available to the programmable control device.

38. (New) The program storage device of claim 34, wherein the instructions to obtain memory configuration information comprises instructions to access a non-volatile storage device.

39. (New) The program storage device of claim 34, wherein instructions to determine a memory capacity comprise instructions to obtain an indication of a maximum number of memory devices for the computer system.

40. (New) The program storage device of claim 34, wherein the characteristic comprises a limit on the number of memory devices that can be installed on a memory channel regardless of the number of open memory examination slots.

41. (New) The program storage device of claim 34, wherein the characteristic comprises a limit on the number of memory devices that can be used with a memory controller.

42. (New) A computer system comprising:  
a processor;  
system memory coupled to the processor, the system memory having one or more memory modules and a memory configuration, wherein the memory modules include one or more memory devices; and  
a configuration routine including instructions to obtain memory configuration information, determine a memory capacity of the computer system, including automatically determining whether a characteristic of a memory device installed in the computer system other than a size of the memory device limits the capacity of the computer system and determine memory upgrade options based on the determined memory capacity.

43. (New) The computer system of claim 42, wherein the instructions to obtain memory configuration information comprise instructions to obtain indications of installed memory devices.

44. (New) The computer system of claim 42, wherein the instructions to determine a memory capacity comprise instructions to obtain an indication of a maximum amount of memory for the computer system.

45. (New) The computer system device of claim 42, wherein the instructions to obtain memory configuration information comprise instructions to obtain an indication of an installed system memory amount.

46. (New) The computer system of claim 45, wherein the memory configuration information further comprises a number of memory module sockets.

47. (New) The computer system of claim 42, wherein the characteristic comprises a limit on the number of memory devices that can be installed on a memory channel regardless of the number of open memory examination slots.

48. (New) The computer system of claim 42, wherein the characteristic comprises a limit on the number of memory devices that can be used with a memory controller.